

**SITUATION REPORT NO. 33**  
**INCIDENT NO. 2000-016**  
**DATE: November 2, 2000    TIME: 9:00 a.m.**

TO: Governor Edward T. Schafer  
State Capitol  
Bismarck, N.D. 58505

1. NATURE OF DISASTER: Flooding, ground saturation and storms.
2. DEATHS AND INJURIES: No change from previous reports.
3. DAMAGES: No change from previous reports.
4. RESOURCES:  
LOCAL: No change from previous reports.  
STATE: No change from previous reports.  
FEDERAL: No change from previous reports.
5. VOLUNTEER ACTIONS: No change from previous reports.
6. MAJOR ACTIONS:

**Program Updates for FEMA-1334-DR-ND**

The Federal Emergency Management Agency (FEMA) Disaster Field Office, located in Bismarck, ceased operations October 31. Division of Emergency Management recovery staff members remain housed at the Manhattan Building at 1022 East Divide Avenue with limited FEMA staff.

As of November 1, Job Service North Dakota has received 5,451 claims and paid \$7,039,049 in Disaster Unemployment Assistance (DUA) benefits to farmers, ranchers, farm workers, migrant workers and other self-employed individuals who have lost income because of disaster conditions. While the application period has ended, Job Service will process claims through December 30. Applicants are eligible for benefits for the period of April 9 through December 30.

The Public Assistance Program has approved 153 eligible requests for public assistance from local governments, state agencies and private non-profit organizations. As of October 31, \$12,731,337 has been obligated to applicants.

9,667 North Dakotans have registered with the Federal Emergency Management Agency (FEMA) Teleregistration Center for individual assistance programs.

- The Disaster Housing Program has received 8,056 applications. To date, FEMA has paid \$15,629,601 in housing benefits.
- The Individual and Family Grant Program, administered by North Dakota Emergency Management, has approved 1,784 applications and has approved more than \$3,425,513 in benefits.
- The Small Business Administration (SBA) has received 2,074 applications to disaster victims and has administered nearly \$11,128,000 million in loans.

### **State Flood Coordination Center Meeting – Devils Lake**

North Dakota Emergency Management conducted a Devils Lake State Flood Coordination Center (SFCC) meeting on October 19, 2000. The 27 participants represented state, local, federal and non-profit organizations. Group discussion took place as follows:

#### **North Dakota Emergency Management**

This summer, while the lake level has remained nearly one foot below last year's record high of 1,447.2 feet, areas around Devils Lake received above normal precipitation. Some areas, however, remained relatively dry. The impacts of the sporadic precipitation on next year's lake level are difficult to assess. However, state, local, federal and volunteer agencies must remain prepared to react as quickly as possible to continuing or additional problems.

North Dakota Emergency Management is working with the N.D. Information Technology Department on plans to place the results of a risk assessment in the Devils Lake Basin on a website by January or February. The hope is to apply for Hazard Mitigation Grant Program (HMGP) to cover project costs. The risk assessment, conducted by the Federal Emergency Management Agency (FEMA) and the State of North Dakota, will assist flood planning, mitigation and preparedness efforts for the Spirit Lake Tribe and in Ramsey, Benson, Nelson, Towner and Eddy counties. This risk assessment identifies infrastructure and residential structures by elevation in one-foot increments. Technology used to gather information included Light Detection and Ranging (LIDAR). Agencies assisting with the assessment included: N.D. Department of Transportation, N.D. Department of Health, N.D. State Water Commission, Public Service Commission, FEMA, North Dakota Emergency Management, Ramsey, Benson, Eddy, Nelson and Towner Counties and the Spirit Lake Tribe.

## **Federal Emergency Management Agency (FEMA)**

FEMA staff continues to place emphasis on monitoring Devils Lake area conditions, even though the lake has remained below its historic high. Earlier this summer, disaster response and recovery efforts focused on problems related to spring flooding in eastern North Dakota, including the Devils Lake Basin. The focus was expanded, and the incident period for FEMA-DR-1334-ND was extended, to include wind and storm damages that occurred August 12 in the Devils Lake area. As of October 19, federal and state assistance provided to Devils Lake area counties for the year 2000 disaster is as follows: Benson, \$950,769; Eddy, \$589,586; Nelson, \$700,432; and Ramsey, \$874,594.

## **National Weather Service (NWS), Grand Forks Office**

Precipitation and Temperature Diagnostic for the Devils Lake Basin 2000: Temperatures during the first half of 2000 were well above normal. Since June, the reverse has occurred as temperatures dropped below normal. Coincidentally, precipitation was much below normal the first half of the year with a total reversal since June. During the past four months, total precipitation ranged from 150 percent in the western part of the Devils Lake Basin to over 250 percent in the eastern part and the Red River Valley.

Significant rains fell in mid-June, particularly in the eastern part of the Devils Lake Basin. Additional amounts of significant rain fell basin-wide in July and August. As the first half of the year was dry, much of the precipitation was absorbed. The precipitation's greatest impact, however, was to halt the steady, slow fall of Devils Lake. Devils Lake had fallen approximately 0.8 feet at Creel Bay during August 1999 to March 2000, according to the U.S. Geological Survey (USGS).

Another factor helping to moderate the impacts the heavy rains has been high Potential Evapotranspiration (PET), where the combination of plant transpiration and evaporation from the soil has been maximized.

### The Outlook for Fall and Winter 2000 / 2001:

The Climate Prediction Center's (CPC) outlooks for this upcoming fall and winter show no preference as to which category precipitation and temperature will fall. In other words, the various atmospheric signals the CPC uses to make long range climate predictions are weak, with no one pattern being apparent.

### Implications for the Spring/Summer 2001:

Based on information provided by the USGS, the North Central River Forecast Center and historical trends, residents of the Devils Lake area should see minor daily tidal fluctuations on the lake through the winter. If the 2000/2001 winter follows the pattern of the repeat of the 1999/2000

winter season, steady or slowly falling lake levels would occur. If the area receives significant snows similar to the 1995/1996 and 1996/1997 seasons, Devils Lake would remain nearly steady this winter with rises of one-half to one and one-half feet next spring and summer. Typically, Devils Lake experiences its greatest rises in the April-June time frame, immediately following the winter/spring runoff.

#### **N.D. State Water Commission (SWC)**

##### Highlights of the National Flood Insurance Program (NFIP):

Revised Flood Insurance Rate Maps (FIRMs) go into effect December 20, 2000. The FIRMs will be mailed in November to communities participating in the National Flood Insurance Program (NFIP). The FIRMs will show the base flood elevation (BFE) for Devils Lake (which is 1,450 feet msl) and also a wave run-up factor, which can add up to five feet of elevation to the BFE in select areas bordering the lake. Seacoast methodology investigated during the study of the lake will not be mapped on the FIRMs.

NFIP participating communities are expected to revise their existing floodplain management ordinances to incorporate the updated FIRM by December 20, 2000. Staff from the State Water Commission (SWC) will work with the communities to revise their ordinances.

The FIRM maps will also feature the Area of Special Consideration (ASC), an area below 1,460 feet msl in elevation. A separate ordinance adopting this hazard area by Devils Lake area NFIP communities will be addressed directly by FEMA Region VIII staff after the December 20, 2000 ordinance update.

##### Hydrologic Update:

The level of Devils Lake remained above or slightly below 1,446 feet level for most of the summer and fall. At this elevation, Devils Lake covers approximately 118,000 acres and holds 2.3 million acre-feet of water.

The Basin has received moderate precipitation during the past few months, and recent rains continue to refill storage in the basin. If the basin remains in this wet state, it could result in a large spring runoff volume if heavy snowfall occurs this winter.

This year, the level of Devils Lake has actually lowered slightly. This may be the first year, during the past eight years of flooding, that the level of Devils Lake ends the year at a lower level.

##### Devils Lake Fact Sheet

The USGS, SWC and the Regional Weather Information Center have completed the fact sheet, on the future probabilities and potential effects of an emergency outlet for Devils Lake. The fact sheet, titled *Climatology and Potential Effects of an Emergency Outlet, Devils Lake Basin, North Dakota*,

gives general information on the Devils Lake Basin and the recent flooding situation. The SWC or USGS can be contacted for copies of the fact sheet.

### **N.D. Game and Fish Department**

Boat access work next spring at Devils Lake will depend on the amount of lake rise. All of the existing boat ramp tops are currently at 1,449.1 feet msl or higher. A two-foot increase in lake level should not present a major boat ramp problem; however, if lake levels increase more than two feet, boat ramps will either need to be extended or relocated.

### **North Dakota Department of Transportation (NDDOT)**

The total investment by federal, state and counties to elevate flood-threatened roads in the Devils Lake Basin amounted to \$90,515,050 during 1994 to 1999. Shares are as follows: \$79,262,033, federal; \$10,121,017, state; and \$1,132,000, local. Of the total amount, \$68,733,787 was allocated for state system roads; \$11,231,000 for county system roads; and \$10,550,263 for Bureau of Indian Affairs projects, passed through the N.D. Department of Transportation (NDDOT).

NDDOT has a backlog of \$31,106,850 in statewide emergency relief (ER) funding, \$26,147,000 of which has been designated for the Devils Lake Basin. NDDOT is awaiting formal release of funding from the Federal Highway Administration (FHWA).

Devils Lake area projects currently under design and estimated total project costs are as follows:

- N.D. Highway 19, U.S. Highway 281 east 5,800 feet, grade raise, \$2,901,000
- N.D. Highway 19, Mauvais Coulee grade raise, \$6,524,000
- N.D. Highway 19, Six Mile Bay grade raise, \$2,963,000
- N.D. Highway 19, Creel Bay to airport grade raise, \$993,000
- N.D. Highway 20 at the Narrows, Junction 57 (approximately one mile) grade raise, \$5,246,000
- N.D. Highway #1, Stump Lake grade raise, \$2,500,000
- N.D. Highway #1, paving, \$500,000
- U.S. Highway 2, Mauvais Coulee (near Churchs Ferry) grade raise, \$6,067,000
- Channel A, between U.S. Highway 281 and Devils Lake, grade structure, \$3,165,000
- U.S. Highway 281, Mauvais Coulee grade raise, \$425,000
- N.D. Highway 57 (east of Fort Totten to Ski Jump Road) grade raise, \$7,191,000

Workers completed paving N.D. Highway 20, from Ski Jump Road to the levee, just south of Devils Lake. These projects are built to an elevation of 1,455 feet.

The department has plans ready, but has not purchased right-of-way, to relocate N.D. Highway 1 at Stump Lake. If needed, the NDDOT could bid this project on short notice. The highway measures 1,411 feet in elevation.

Bids were received last year for emergency riprap repairs on all the area lake crossings if high winds cause erosion, damage to riprap, or heavy debris deposition. The contractor will be required to react on very short notice to make necessary emergency repairs. A windstorm earlier this year caused \$15,500 in damages; repairs were made through the contract.

The Devils Lake Surface Transportation Task Force has requested a change in ER regulations that would allow NDDOT to be more proactive in addressing road problems caused by flooding. The change would allow NDDOT to raise the roads if they are within three feet of inundation. NDDOT worked with the FHWA to determine which roads would be eligible. NDDOT now plans to proceed in efforts to obtain additional money that has been obligated.

The grade raises on N.D. Highway 20 at Mission Bay and Black Tiger Bay were completed and paved. These grade raise sites, as well as other locations throughout the basin, are acting as dikes and can't be raised again until a determination is made on the Task Force's requested change in ER regulations.

### **N.D. Highway Patrol**

During the summer of 2000, one primary struggle for law enforcement occurred on N.D. Highway 20, south of Devils Lake. Because of construction, travelers commuting through this area experienced lengthy delays. This became a concern for the Highway Patrol and others that provide emergency services. Alternate routes are few and require a much greater distance. While the Highway Patrol did not receive a lot of complaints of violations in the construction zone, troopers were notified that, in some situations, motorists failed to comply with flaggers in this area. These situations were addressed on a case-by-case basis. The Highway Patrol also had difficulty obtaining compliance from motorists regarding the reduced speed limit. A number of motor vehicle accidents occurred in the construction area, as well.

Unlawfully parked vehicles caused problems along the lake crossings of Six Mile Bay and Mauvais Coulee along N.D. Highway 19, west of Devils Lake, and the Narrows Crossing, along N.D. Highway 20, south of Devils Lake. Even in locations where "no parking" signs were posted, troopers had problems with unlawfully parked cars. In some instances, fishermen

unloaded boats off of N.D. Highway 19, west of Devils Lake, and parked their trailers on the shoulder. Troopers took the appropriate enforcement action. Some of these areas are not currently signed for no parking; the Highway Patrol plans to meet with NDDOT to discuss how these areas should be posted next year.

Troopers also received several complaints about unlawfully parked vehicles along the Woods-Rutten Road crossing, east of Devils Lake and south of the Hefti Rest Area. People were also fishing in restricted areas. These situations presented a traffic hazard for those using the roadway.

Looking to the future, the Highway Patrol plans to offer input regarding possible alternate routes if N.D. Highway 19, west of Devils Lake, undergoes a grade raise next summer. Because the highway is heavily traveled, construction in the area will have a significant impact on many motorists.

### **North Central Planning Council (NCPC)**

North Central Planning Council is currently conducting the Hazard Mitigation Grant Program (HMGP) acquisition project for the city of Churchs Ferry. Properties included in the acquisition are residences, commercial lots and some commercial buildings. As of today, all but two families have accepted offers; these families have opted to stay and maintain what remains of the city.

NCPC has committed \$90,000 of Community Development Block Grant (CDBG) funds for the local match for the city of Minnewaukan's city renovation of water and sewer lines. FEMA is contributing approximately \$1.5 million dollars.

### **N.D. National Guard**

Workers at Camp Gilbert C. Grafton are nearing completion of the Avenue A shoreline riprap project, which was designed to protect the flood-threatened roadway and utilities. The riprap was placed to an elevation of 1,460 feet. Cleanup work remains, and seeding will take place next spring. Many trees that were removed will be replanted.

Floodwaters forced the relocation of one camp residence. Although the home has been relocated, it will not be habitable for at least one month.

The camp's gate and entrance structures along N.D. Highway 20/57 were removed during summer to accommodate the highway grade raise. No specific plans to replace them have been formulated.

### **U.S. Army Corps of Engineers (USACE), St. Paul District**

The Corps is prepared to respond to immediate flood threats to protect public property, primarily communities and utilities.

The lake level protection system for the city of Devils Lake is essentially complete. The current total cost of the project is approximately \$42 million. The USACE will maintain an office in the City of Devils Lake.

The St. Paul District will contact the Spirit Lake Tribe to review the status of emergency levees protecting portions of the reservation. One concern is the emergency levee that is currently protecting a portion of N.D. Highway 20. Loss of the levee would inundate a portion of the state highway.

### **Lake Region Human Service Center, N.D. Department of Human Services**

The Disaster Outreach Program, provided by the N.D. Department of Human Services, had initially been funded by the National Center for Mental Health through September 9, 2000. However, due to the unique and enduring nature of the area's closed-basin flooding, the program was granted a three-month extension. The program will close at the end of November.

As of August 25, 2000, the disaster crisis counselors contacted the following numbers of people affected by the flood:

Total Numbers for Regular Grant Period	
Total Unduplicated Count.....	1476
Total Duplicated Count.....	1227

Crisis counselors have been canvassing flood-affected communities to identify remaining needs and impacts on affected people. This activity will continue for the duration of the program.

Meanwhile, Center staff has been working with the HandS (Helping and Support Hands) Interfaith Coalition to plan an event to bring together residents, particularly of a local trailer park, who were affected by the August 12 storm.

Lake Region Human Service Center staff has been working with the Mental Health Association to schedule a presentation, entitled *Why Burn Out When You Can Fire Up?*, for emergency response staff within the region.

Center staff will also meet with members of the N.D. Volunteers Active in Disaster (VOAD) on November 14 to discuss and plan crisis-counseling assistance in the absence of the Disaster Outreach Program. Center staff will also explain personal struggles that are significant across the region. Center staff will discuss the possibility of volunteer agencies assisting with unmet crisis counseling needs, case management or advocacy.



### **Nelson County Highway Department**

Because of inundation, approximately six road sites will not be repaired this year. Staff from the Highway Department has been reviewing options with state and federal Public Assistance Program staff.

Log jams and debris-related problems have contributed to flooding along the Sheyenne River. Many trees along the river have died because of continued flooding. Contributing to the debris problem were cows that had either drowned or had died as a result of anthrax poisoning.

### **Nelson County Emergency Management**

Washout areas on Nelson County Road #9, between Grand Forks and Nelson counties, are under repair. The dispatch center at Devils Lake Law Enforcement Center has been notified of closures along the road.

The Nelson County Housing Rehabilitation Committee members met twice this summer and developed a description for a disaster-rehabilitation housing project that is underway. The Red River Regional Planning Council provided funding for the project, which will be completed in 2001. Approximately 10 homes have been identified in Nelson County that qualify for this project.

Nelson County commissioners met with the representatives from the Devils Lake Improvement Association on September 7, 2000, to discuss the purchase of land near Tolna. The commission plans to clean the Tolna Coulee outlet from Stump Lake

### **Ramsey County Rural Utilities (RCRU)**

Ramsey County Rural Utilities (RCRU) sustained little damage as a result of the August 12 storm. Wave action damaged a lift station near the lake, and the high winds may have caused a small leak in the water tower.

Since 1992, the utility has lost 222 sewer and 108 water customers to the lake. The utility had 69 lift stations in use in 1992; currently that number is 21.

RCRU is working to protect water lines from the lake. Water lines that are inundated by the lake are not accessible for repair, and bolts that are holding valves together have deteriorated in several areas, causing valve failures.

Utility workers are hoping to obtain funding that would allow work with the NDDOT to install a new water line across Six Mile Bay in conjunction with a grade raise that could occur next year. Installation of a water line during roadway construction will save money and allow the utility to continue to provide service for residences west of Six Mile Bay and Grahams Island State Park.

## **Ramsey County Emergency Management**

Ramsey County officials have identified approximately 1,200 structures along the Devils Lake shoreline that are 1,460 feet or below. Property owners must agree to relocate their structures outside the Area of Special Consideration if they are eligible for the new insurance endorsement. Relocation will be based on lake crest elevations and imminent threat.

Results from monitoring of Devils Lake city wells show an increasingly high water table. This year, the city responded to 30 water breaks; typically only 10 occur.

### **General Discussion**

State Flood Coordination Center meetings will resume in early 2001 after the National Weather Service issues its first flood outlook for the Devils Lake Basin. North Dakota Emergency Management will send a meeting notice to all participants.

7. ASSISTANCE NEEDED: No change from previous reports.
8. OUTSIDE HELP ON SCENE: No change from previous reports.
9. OTHER: FEMA has developed a web page with cleanup and recovery information. The page is located at:  
<http://www.fema.gov/reg-viii/floods.htm>

Situation Reports published by North Dakota Emergency Management are posted on the Division's Internet home page. The address is:  
<http://www.state.nd.us/dem>.

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Douglas C. Friez, State Director